ECOSLO PESTICIDE BROCHURE PROJECT

BY

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ABSTRACT

This report relates the process, experience and completion of the pesticide brochure created for ECOSLO. This report contains a detailed documentation of the project process as well as notes, sketches, renderings and a final version of the brochure created.

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Chapter One- Introduction

My senior project began with a good working relationship I already had established with ECOSLO, the environmental center of San Luis Obispo. During last summer I had an internship there designing print materials for one of their annual events, Coastal Cleanup Day. Non-profit organizations are always on the lookout for free resources to forward their cause. Since I had such a good experience during the summer and had impressed the staff there with the work I had done the summer before, we decided that I would do a senior project for them. After meeting a few times following my summer internship, it was decided that print material about household pesticide use would be designed to coincide with a grant they received to inform the public in San Luis Obispo County on the subject.

This informational brochure would be created for distribution to the general public. Thus, the Statement of Purpose is to create a brochure with emphasis on graphic elements and illustrations as well as helpful information about pesticides. ECOSLO wanted the content of the brochure to be targeted towards residents and to also have a children's activity page so that parents and kids could discuss household chemicals and pesticides together. This would tie into the educational program facet of the grant. The brochure would contain information defining general pesticides, household pesticides and common alternatives to harmful chemical use in the home as well as a section of what to do in case of exposure to harmful chemicals. The section for the children would include a small amount of informative text and an activity that children and parents could complete together. This brochure was to be the first of several print materials in a series that would be designed and released at a later date. Statement of Objective: this brochure is designed

to serve as a useful example of a real-world application of illustration and typography skills.

Before the beginning of the project, several limitations were noted before the process began. Limitations of time and scheduling were determined to be the most constraining. The schedules of all the participating parties did not always coincide and considering the short time of a ten-week quarter given for the completion of the project, it was noted as being a major obstacle. Client expectations and communication were also noted as being a stumbling block during the duration of the project. This was because the client came to the table without a clear-cut idea of what they wanted the brochure to contain and was unsure of what it was they wanted me to complete. Communication was also an issue due to time constraints, other projects and my own unwillingness to be stickler and ask for the content on a daily basis. Cost was the last limitation to be considered. Due to the grant award, ECOSLO seemed confident that they had the resources available to print and distribute the brochure. Nevertheless, their budget would determine the paper selection and kind of printing for the final product.

Chapter Two- Research

After initial talks of what the client needed and about the content to be including, the first step was to find inspirational material. There were many brochures that ECO-SLO had already collected, some they had produced in the past. Most of these brochures lacked color, images, vibrancy, readability and were heavy on text. For this reason, we decided that the brochure that I was to create would feature full color and illustrations to set it apart from most of the other informational brochures available. We explored several size options and discussed printing methods. If it were printed at 8.5 x 14", it would be larger than most brochures and stand out visually. This is especially important since it will have to compete with many other informational materials where it will be distributed. (This was entirely evident in the review of other brochures that were heavy on information and were lacking in visual appeal). During the research process, I also visited several of my favorite design websites such as thedieline.com and looked through several issues of Communication Arts magazine to gain inspiration.

Inspiration was first gained by a review of the work done in the past for ECOSLO and illustrations done during the duration of my internship. The client wanted the brochure to not only contain pertinent information but to also link the content and the design to San Luis Obispo County since the audience would be its residents. Observing the iconic landscape and reflecting upon the picturesque setting of San Luis Obispo County as a means to link the brochure to the area gained inspiration for the style of the brochure and its illustration content.

Chapter Three- Procedures and Result

We decided that the copy of the brochure was to be split up into several sections. Each section would be given a corresponding symbol instead of a large illustration that would crowd text and limit legibility. The four main sections were the kitchen, the bathroom, the garden and exposure. The first three focused mostly on cleaning and gave alternatives to harsh and harmful chemicals. The exposure section dealt with how to detect exposure to chemicals. Inspiration was gained for these symbols through the written content, but also by the help of classmates in the senior project class through their helpful feedback and advice.

Format

ECOSLO wanted the brochure to be designed to target both adults and children so that the content would be discussed within the family. The information in the brochure is applicable to those living in both houses and apartments and can be utilized by all demographics. The brochure is intended for distribution at non-profit locations, community events, special presentations and tabling events such as Farmer's Market. The brochure may also be mailed to members of non-profit organizations along with newsletters as well as the general public.

Illustrations (please see Visuals chapter for examples)

Because the client wanted the brochure to be distinguishable and stand out amidst other informational print materials, I designed it to be larger than most, at 8.5" x 14". At this

size, there would be eight panels, four on each side when unfolded. Six of these panels would be devoted to the content for the adults and two would be for the content intended for children. The first panel would be the front of the brochure and features an illustrated view of Bishop Peak, iconic to San Luis Obispo. The order of the content of the brochure changed several times during the project process. There were issues of readability and order as well as folding to be considered during several revisions. The sections remain the same as they were initially written, but the order has changed slightly over time and the manner in which the brochure folds and opens has also changed. The ECOSLO brochure has two sides. The first side is intended for and older audience and features information about the definition of pesticides, the use of pesticides and chemicals outside and alternatives to using harsh chemicals in cleaning. This latter section is separated into two parts: the kitchen and the bathroom. The cleaning section carries over to the other side of the brochure as well as a section about pesticide exposure. On this side, one panel is intended for adult readers, while two panels feature a puzzle for children. The remaining panel on the second side is actually the cover of the brochure when folded. The children's section features a small explanatory paragraph and a simple crossword puzzle.

I made many lists were made to explore several directions that the design could take and to help to determine the content of illustrations. Following the making of lists, I made several sketches to develop the caterpillar character to be featured in the children's section. A character would make this section more friendly and appealing. However, upon receiving the copy, the children's section had to be downsized to be able to fit all the content onto the prescribed brochure size.

While developing the character that I came to name "Oscar", I was also working on

developing a name for the program that was being developed for this brochure to feature. There was already and existing name, but the client wanted it updated and to be more catchy. We decided to try the acronym L.E.E.P., that stands for Local Educational Environmental Program. ECOSLO was receptive to this acronym because its spelling and sound closely resembled the word “leap”, which could aid in making the program name more recognizable and easy to remember.

Further illustrations were made for the cover of the brochure as well as the inside. Initially, the brochure was designed so that the text was to overlay on the illustrations. It was later decided that the brochure would feature illustrative icons to identify each section instead of larger illustrations. This would make the text more legible and save space. The full-bleed illustration would still be used on the cover of the brochure. Using the initial sketches, the artwork was outlined in black pen, scanned into the computer and colored digitally with the aid of tablet. The same process was done for the icons that were developed later as well as the illustrations featured in the children’s section.

Layout and Typography

Initially, the layout chosen was different from the order previously described. After careful review from the client, the order of the text and illustrations was changed to create better flow and present more cohesive ideas in a logical order. For the body copy, Bell MT typestyle was chosen due to its superior legibility and ability to fit into small columns. The typeface Alor Narrow was chosen for the titles of each section as well as the cover of the brochure because of its playful and whimsical appearance. Alor Narrow

would add to the attractiveness of the brochure. Throughout the body copy, section titles were bolded for emphasis within the Bell MT family.

Following the layout and typography, and several after revisions (to check for legibility, spelling errors and cohesiveness) the final brochure was ready to print. The client specified that the brochure should be printed on plain fiber paper so as not to distract from the text. The printer recommended for the this project was Poor Richard's Press on account of the good working relationship between them and ECOSLO. Plus, Poor Richard's Press also uses soy-based inks and recycled paper, which adds to ECOSLO leading by example. The initial run would be small, intended to be the first release of the brochure. Several runs may follow pending on how well the brochure is received.

Chapter Four- Summary and Recommendations

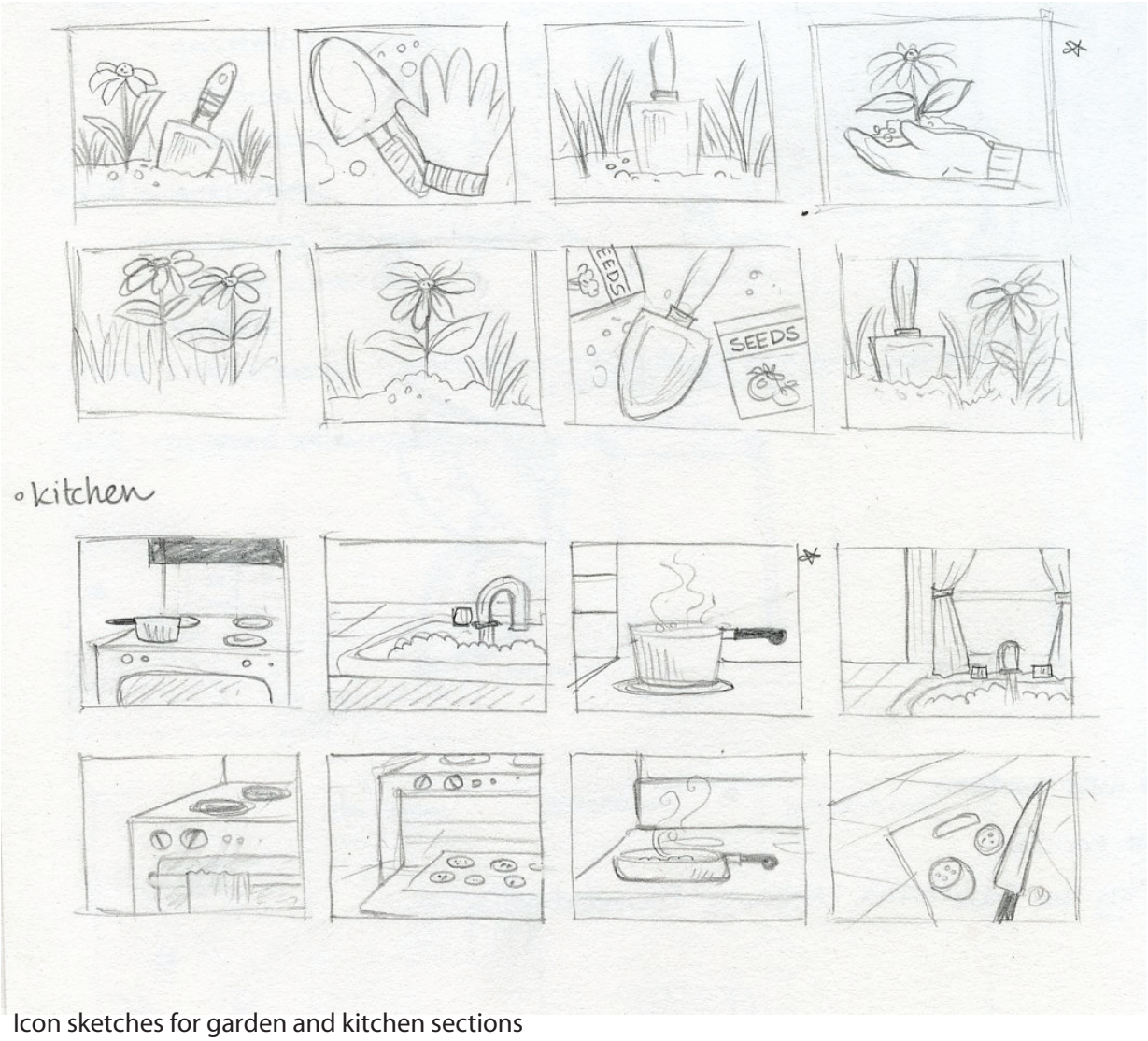
Over the course of eight weeks, a full color brochure was created for the use of ECOSLO and other local environmental agencies as a means to educate the public on pesticide and chemical use in a domestic setting. The process demanded my skills, of illustration, working with typography and layout, negotiating with the client, printer and classmates.

During the course of this project I learned more about layout and applying information to a media that can be easily understood by the general public. This process was especially rewarding because of my support of ECOSLO and the knowledge that what I helped create may do a small part in preventing pesticide abuse and pollution. In such hard economic times, design done for free is especially appreciated by non profits and helps to build relationships between designers and clients that can be applied to the working world later. I have also learned that working for non-profits can open other doors for further work with other organizations or businesses.

As in any project experience, there were slight speed bumps in the process. The most problematic component encountered was client communication. Understandably, ECOSLO is a busy organization with many other projects that they are working on. It was difficult to receive the text in a timely manner from the client despite regular communications. It was also difficult to figure out exactly what the client wanted to see because they themselves did not know. I also recommended maintaining tighter communication with the client in the future, and to utilize not only email but phone calls as well. I recommend further research to gather examples that could be presented to the client to help determine a direction for the project.

Chapter 5- Visuals

Oscar concept sketch and development



Icon sketches for garden and kitchen sections

Scenery sketches and line art

What is a pesticide?

A pesticide is any substance or mixture of any substances used to prevent the development of, repel, destroy or kill a pest.

Some pesticides are classified as Restricted Use pesticides if there is a reason to believe that their use could harm humans, livestock, wildlife or the environment even when used according to their label directions. To apply these, a license is required. All other pesticides are classified as General Use pesticides and anyone can apply them according to their label directions.

Types of pesticides

Many types of pesticides are available to control pests. Some such as fumigants (gases) are nonspecific. They control a wide variety of pests such as insects, weeds, nematodes, and fungi in the application area. For example, an aerosol bomb will kill all insects in the room in which it is applied. Other pesticides are very selective, in that they may eliminate a pest only at a certain stage of its development or control only specific types of pests. For example, ovicides kill only the eggs of insects and will not harm the adult insect pests. Antimicrobial products (bactericides, biocides, disinfectants, and sanitizers) are another type of pesticide. These products are used to destroy or suppress the growth of harmful microorgaminsms such as bacteria, viruses, or fungi on inanimate objects and surfaces.Ordinary household cleaning agents and sanitizers such as bleach and ammonia are regulated as pesticides if information on their product labels indicates they can be used as disinfectants or germicides.

Common household pesticides

1. Cockroach sprays and baits
2. Insect repellents to repel mosquitoes and other biting insects
3. Rat and other rodent poisons
4. Flea and tick sprays, powders and pet collars
5. Kitchen, laundry, and bath disinfectants and sanitizers
6. Products that kill mold and mildew
7. Some lawn and garden products such as weed killers
8. Some swimming pool chemicals

Pesiticides in the Garden

According to the Environmental Protection Agency, 100 million pounds of active ingredients from herbicides, insecticides, miticides, and fungicides were applied in homes and gardens in the United States in 2001. This amount generated by homeowners is only a fraction of the total amount. If application of pesticides by professionals was included, the number would increase dramtically.

Pesticide Resistance

There is a potential for pesticide resistance associated with the use of many low-risk products. Pesticide resistance is related to the genetics of the pest and occurs when a pesticide product no longer has a negative effect on a pest. Many low-risk pesticides are prone to the development of pesticide resistance because they target a single mechanism in the pest, which can be overcome by a single mutation in the genes of the pest.

Pesticide resistance occurs by several different mechanisms depending on the characteristics of the pesticide product and the pest. A simple example of how the application of pesticide could result in the development of resistance is when a homeowner applies consecutive applications of a fungicide that disrupts a single mechanism in the fungal pest. Some individual fungi within the fungal population may possess a genetic variation that allows them to escape harm from the single-site fungicide. Consecutive applications of the fungicide eliminate those that are not resistant. As the resistant fungi continue to reproduce, a larger and larger percentage of the fungal population is resistant to the fungicide and the pest problem worsens.

Evaluate Pest Problems and Control Options

When evaluating potential pest problems in the home, garden and landscape, keep an open mind – pests are not the only cause of plant problems. Abiotic, or nonliving, factors are also common causes of plant decline and death.

Commonly encountered abiotic problems that may be mistaken for pest problems include chemical injury from herbicide drift, nutrient problems, and an assortment of environmental stress factors and cultural problems. When confronted with declining plants, determine what abiotic factors, such as drought, poor soil conditions, mechanical injury, poor planting or chemical injury, might be involved.
If you are considering a pesticide application in the home landscape, remember that pesticides should be the last line of defense and pesticides should be used only when alternative approaches cannot reduce the problem to an acceptable level. Be aware that there are no true "all purpose" pesticides. (One fungicide will not control all fungi, a single herbicide will not control all weeds and a insecticide or miticide will not control all insects and mites.)

Consider other factors to improve the health of your soil and plants, for example, using compost in your garden will improve the health of your soil. More nutrients will be available for your plants and in turn create stronger, healthier and more pest-resistant plants. If you don't have a compost bin set up, EcoSlo has compost workshops and information on how to get started with a compost bin or worm bin. Your local master gardeners can also be reached by phone to help you with questions regarding your garden.

Master Gardeners in San Luis Obispo: 2156 Sierra Way, Suite C San Luis Obispo, CA 93401 (805) 781-5939 or (805) 781-1429
Email:mgsanluisobispo@ucdavis.edu

UC IPM Statewide program
http://www.ipm.ucdavis.edu/

Alternatives in Cleaning

Basic Ingredients for Non-toxic Cleaner Recipes
Five basic ingredients serve as the building blocks for many safe home cleaning needs:
1. Baking Soda - Cleans and deodorizes. Softens water to increase sudsing and cleaning power of soap. Good scouring powder.
2. Borax - Cleans and deodorizes. Excellent disinfectant. Softens water. Available in laundry section of grocery store.
3. Soap - Biodegrades safely and completely and is non-toxic. Available in grocery stores and health food stores. Sold as liquid, flakes, powder or in bars. Bars can be grated to dissolve more easily in hot water. Insist on soap without synthetic scents, colors or other additives.
4. Washing Soda - Cuts grease and removes stains. Disinfects. Softens water. Available in laundry section of grocery store or in pure form from chemical supply houses as "sodium carbonate."
5. White Vinegar or Lemon Juice - Cuts grease and freshens.

The Bathroom

Toilet Bowls
Pour: ¼ c. baking soda into bowl drizzle with vinegar. Let sit for ½ hour. Scrub and flush. Add borax for stains.

Air Fresheners
Commercial fresheners work by masking smells, coating nasal passages and deadening nerves to diminish sense of smell.
Instead, find source of odors and eliminate them. Keep house and closets clean and well-ventilated and grow lots of house plants.

Simmer: Cinnamon sticks, orange peel and cloves in water to naturally freshen the whole house.

To absorb odors, place 2 to 4 tbsp. baking soda or vinegar in small bowls in refrigerator and around the house and pour ½ cup baking soda in the bottom of trash cans.

Window Cleaner
Mix together: 2 tsp. vinegar 1 qt. warm water OR 2 tbsp. borax 3 c. water
Rub dry with newspaper to avoid streaking.

(Cleaning tips continued on reverse side).

The Kitchen

All-Purpose Kitchen Cleaner
• Dissolve 4 tablespoons baking soda in 1 quart warm water for general cleaner. Place in a spray bottle if desired. Or use baking soda on a damp sponge. Baking soda will clean and deodorize all kitchen and bathroom surfaces. Excellent for cleaning refrigerator interiors and as a spray air freshener.
• For tougher jobs, mix vinegar and salt together for a good surface cleaner

Scouring Powder
Baking soda or table salt are mild abrasives and can be used as an alternative to chlorine scouring powders. Simply put either baking soda or salt on a sponge or the surface you wish to clean and then scour. Good for pots and pans

Exposure

There are three types of exposure: dermal,inhalation, and ingestion. Dermal exposure is the most common type of exposure for the applicator since the skin is easily exposed when handling pesticides. Inhalation or breathing a pesticide into the lungs is less common, but is still a potential danger to the applicator. Ingestion occurs least frequently with careful applicators, but exposures do occur when users eat, smoke, or drink around pesticides or forget to wash after use. Even though hands and forearms are most subject to exposure, other parts of the body (eyes, abdomen, groin) absorb pesticides more quickly. The eyes and skin can also be badly damaged by the corrosive effects of many chemicals.

Learn more at:

EcoSlo
ENVIRONMENTAL CENTER OF SAN LUIS OBISPO COUNTY

1204 Nipomo Street, San Luis Obispo, CA
(805) 544-1777 ecoslo.org

Funded by the California Wellness Foundation

KIDS!

Harmful chemicals are sometimes used to clean or to get rid of unwanted creatures such as nasty bugs or rats. These chemicals can be dangerous to people, plants and animals. It's important to keep our homes clean and safe from harmful pests. It's also important to use chemicals that do not hurt the environment. Explore this brochure with your parent or guardian to learn how important being careful about bad chemicals and the environment really is!

Teenie Ladybug's
Word Search

Help Teenie Ladybug locate the words that deal with pesticides and harmful chemicals in the word bank. They can be across, diagonal, down and even backwards!

word bank

bleah	bug	lawn
insect	fungus	flea
mold	poison	tick
roach	pest	

San Luis Obispo County
L.E.E.P.
Local Environmental Education Program

Household Pesticide Guide and Children's Activity Page

A project by EcoSlo
ENVIRONMENTAL CENTER OF SAN LUIS OBISPO COUNTY